



Solutions for Industry

Flow Products



- ▶ Flow Computers
- ▶ Batch Controllers
- ▶ Flow Rate Totalizers
- ▶ Field Indicators

Counters, Ratemeters & Timers



- ▶ Digital Panel Meters
- ▶ Temperature Monitors
- ▶ Encoders & Sensors
- ▶ Enclosures

O/I Panels & LCD Monitors



- ▶ Operator Interfaces
- ▶ HMI Panels
- ▶ Message Centers
- ▶ LCD Industrial Monitors

KEP-CM: Contract Manufacturing



- ▶ Printed Circuit Board (PCB) Review
- ▶ Printed Circuit Assembly
- ▶ Prototype Assembly
- ▶ Cable and Harness Assembly

Inflink-HMI Software



- ▶ Automation Software
- ▶ SCADA/HMI
- ▶ OPC Server



Kessler-Ellis Products

10 Industrial Way East, Eatontown, NJ 07724 • TF: 800-631-2165 • PH: 732-935-1320 • www.kep.com

SUPERtrol-2 (ST2) Series Flow Computer with Liquid, Gas, Steam & Heat Flow Equations



- ▶ "EZ Setup"- Guided Setup for First Time Users
- ▶ Liquid, Gas, Steam and Heat Flow Equations
- ▶ Utility Metering
- ▶ Menu Selectable Hardware & Software Features
- ▶ Internal Data Logging Option
- ▶ Isolated Pulse and Analog Outputs Standard
- ▶ RS-232 Port Standard, RS-485 Optional
- ▶ Windows™ Setup Software
- ▶ NX19 Gas Equations, Stacked DP Transmitters
- ▶ DDE Server & HMI Software Available
- ▶ Remote Metering by Wireless or Modem and TROLlink Remote Metering Software Available
- ▶ A Variety of Communication Protocols Solutions are available including Modbus-TCP, BACNET-IP, BACNET-MSTP and Others

DESCRIPTION

The SUPERtrol II (ST2) Flow Computer can be used with a variety of flowmeter types in liquid, gas, steam and heat applications. Multiple flow equations are available in a single instrument with many advanced features.

The various hardware inputs and outputs can be "soft" assigned to meet a variety of common application needs. The user "soft selects" the usage of each input/output while configuring the instrument.

The isolated analog output can be chosen to follow the volume flow, corrected volume flow, mass flow, temperature, pressure, or density by means of a menu selection. Most hardware features are assignable by this method.

The user can assign the standard RS-232 Serial Port for external data logging, transaction printing, or for connection to a modem for remote meter reading. The system setup can also be printed.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/st2

ES747 Flow Computer for Liquid & Gas Applications



- ▶ UL Listed
- ▶ Supports Pulse Producing Flowmeters
- ▶ Rate/Total and Batching Functions
- ▶ Universal Viscosity Curve (UVC) and Strouhal/Roshko Advanced Linearization Methods
- ▶ Gas & Liquid Flow Equations (Volume, Mass, Corrected Volume) API 2540, AGA-7 Equations
- ▶ 10 Selectable Fluid Tables
- ▶ Advanced Batching Features: Overrun Compensation, Print End of Batch
- ▶ Menu Selectable Hardware & Software Features
- ▶ Data Logging
- ▶ Two Line LCD or VFD Display
- ▶ Isolated Pulse and Analog Outputs
- ▶ Standard RS-232 Port Standard, RS-485 Optional
- ▶ Windows™ Setup Software DDE Server & HMI Software Available

DESCRIPTION

The ES-747 Flow Computer satisfies the instrument requirements for pulse producing flowmeters in liquid and gas applications. Multiple flow equations and instrument functions are available in a single unit with many advanced features.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/es747

Specialty Flow Computers Flow Computers for Special Applications



- ▶ ST1-NET-FC - Net Rate/Total Flow Computer for Liquid Applications
- ▶ ST1-SUM-FC - Rate/Total Flow Computer for Sum of 2 Flowmeters in Liquid Applications
- ▶ ST1-MANIFOLD-FC - 2 Channel Manifold Controller & Flow Computer for Liquid Applications

DATASHEET www.kep.com/st1net

DATASHEET www.kep.com/st1sum

DATASHEET www.kep.com/st1man

See our web site for information on other flow computer family members: **WEBSITE** www.kep.com/flow

MINI-Batcher (MB2) Low Cost Flow Batcher from Pulse Inputs



- ▶ 5 Digit Scaling Factor
- ▶ Display Rate, Batch Size and (Number of Batches or Grand Total)
- ▶ Second B Relay Programmable for Output at Prewarn or selected Batch/Grand Total
- ▶ Pulse Input - 10 kHz Max.
- ▶ Security Lockout
- ▶ RS422/RS232 Serial Communication Option
- ▶ Modbus RTU RS422/RS485/RS232
- ▶ NEMA 4X / IP65 Front Panel

DESCRIPTION

The MINI-Batcher is a 6 digit LED flow batcher with totalizer and 4.5 digit ratemeter display with two relay outputs for batch control. One output is dedicated to the batch amount (Preset A), the other can be activated for Prewarn or Batch/Grand Total. The MB2 can count up to the preset (reset to 0) or down from the preset (set to preset). Start, Stop and Reset functions can be activated from the front panel or remote inputs. The MINI-batcher is a must have for low cost batching systems.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/mb2

BATCHtrol II (BT2) Flow Batch Controller



- ▶ Easy To Use Batch Controller
- ▶ Start/Stop Buttons & Remote Inputs
- ▶ Separate 8 Digit K-Factors For Rate & Total
- ▶ Accepts Pulse or Analog Inputs (order option)
- ▶ Displays Rate, Total and Grand Total
- ▶ Security Lockout with Missing Pulse Detection
- ▶ Scaled Pulse Output
- ▶ Two Way RS232/422 Communications Option

DESCRIPTION

The BATCHtrol II Batch Controller features 8 digits of bright, 0.55 inch, LED display and can accept up to 20 kHz flow input from pulse producing flowmeters. The analog input versions accept inputs, such as 4 to 20 mA or 1 to 5V. The standard unit has two separate, 8 digit, floating decimal, "K" factors to convert the inputs to meaningful total and rate data. An optional 16 point K-factor can linearize flow from nonlinear meter outputs.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/bt2

SUPERtrol-1 (ST1) Series Multi-Function Flow Totalizer, Ratemeter and Batcher



- ▶ UL Listed
- ▶ "EZ Setup" Guided Setup for First Time Users
- ▶ Rate/Total and Batching Functions
- ▶ Menu Selectable Hardware & Software Features
- ▶ Environmental Compliance Monitoring and Report Generation
- ▶ Universal Viscosity Curve (UVC) and API Eq.
- ▶ Batch Controller with Advanced Batching Features including: Overrun Compensation, Print End of Batch, Slow Fill, 2 Stage Batching, Digital Valve Control
- ▶ Isolated Outputs Standard
- ▶ RS-232 Port Standard, Modbus RTU RS-485 (Opt.)
- ▶ Advanced Printing Capabilities
- ▶ Windows™ Setup Software
- ▶ DIN Enclosure with Two Piece Connectors
- ▶ On Board Data Logging
- ▶ DDE Server & HMI Software Available
- ▶ Enhanced Modem Features for Remote Metering

DESCRIPTION

The SUPERtrol-I (ST1) Flow Computer offers advanced batching features for all types of flow batching systems. The ST1 is compatible with a variety of flowmeter types in liquid applications. Multiple flow equations and instrument functions are available in a single unit with many advanced features. The isolated analog output can be chosen to follow volume flow, corrected volume flow, mass flow, temperature, or density by means of a menu selection. Most hardware features are assignable by this method. The user can assign the standard RS-232 Serial Port for data logging, transaction printing, or for connection to a modem for remote meter reading.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/st1

Custom Batch Control Systems Batch Control Made Easy!



- ▶ Custom Batch Control Using Flow Computers & Touchscreen Interfaces
- ▶ Many Configurations Available
- ▶ Choose From Our Wide Selection of Enclosures and Accessories.
- ▶ Custom Wiring and Accessory Mounting is Also Available

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/batch

MINItrrol (MRT) Totalizer & Ratemeter from Pulse Inputs



- ▶ CSA Certified
- ▶ Separate Scaling Factors For A & B Inputs
- ▶ Display Rate & Total
- ▶ Pulse Input - 10 kHz Max.
- ▶ RS422/RS232 Serial Communication
- ▶ Modbus RTU RS422/RS485/RS232
- ▶ NEMA 4X / IP65 Front Panel
- ▶ Separate Add/Subtract Simultaneous Inputs
- ▶ Quadrature & U/D Direction Control Inputs
- ▶ 30mV Magnetic Pickup Inputs
- ▶ 4-20mA or 0-20mA Analog Output

DESCRIPTION

The MINItrrol (MRT) is a 6 digit totalizer and ratemeter with two level, 5 digit preset alarm control of total or rate. Inputs A & B have separate scaling K-factors. The totalizer can be programmed for "A" subtract "B", "A" add "B" or A & B as separate totalizers, with display and control of the "net" total and rate of "A". The MINITROL is also available in 4 other versions. MC2: a two preset totalizer with scaling, MR2: a high/low alarm ratemeter with scaling; The "MC": a totalizing counter only, and the "MR": a rate meter display only.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/mrt

Intellect-69 (INT69) & ES756INT69 Ratemeter & Totalizer from Analog Inputs



- ▶ High/Low Scaling From Front Panel
- ▶ 2 Set Points Assignable To Rate or Total
- ▶ Relay Outputs
- ▶ Display Rate (pressure, level, watts, etc.), Peak & Valley and Integrated Total
- ▶ 0-5V, 0-10V, 1-5V, 4-20mA or 0-20mA Analog Input
- ▶ NEMA 4X/IP 65 Front Panel
- ▶ +24V Output For Peripherals
- ▶ RS422/232 Serial Communications
- ▶ 4-20mA Output
- ▶ Square Root Extraction

DESCRIPTION

The Intellect-69 is an integrating totalizer & ratemeter which accepts analog signal inputs. The unit can be field programmed to accept 4-20mA, 0-20mA, 0-5V, 0-10V or 1-5V signals. An optional Square Law input is available for inputs that require square root extraction. A 4-20mA output option is available to control strip recorders or other peripherals. The ES756INT69 is a special variant for water/wastewater industry with enhanced features.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/int69

SUPERtrrol-1LE (ST1LE) Advanced Ratemeter & Totalizer



- ▶ UL Listed
- ▶ EZ Setup Feature Speeds Instrument Setup
- ▶ Setup Diskette
- ▶ Advanced Batching Features, Including QuickBatching Sequence
- ▶ Menu Selectable Hardware Features
- ▶ Two Line LCD. OLED or VFD Display
- ▶ 0-20mA or 4-20mA Analog Output
- ▶ NEW! - Attractive Wall Mount Enclosure Option
- ▶ Isolated Pulse Output Standard
- ▶ RS-232 Port Standard, RS-485 Optional
- ▶ Advanced Printing Capabilities
- ▶ Data Logging and Modem Remote Metering Support
- ▶ DIN Enclosure with Two Piece Connectors
- ▶ DDE Server & HMI Software Available

DESCRIPTION

The SUPERtrrol 1LE (ST1LE) batch controller is a flow rate totalizer for use with pulse producing flowmeter types in liquid applications.


The alphanumeric display shows flow rate and flow total as well as measured and calculated parameters in easy to understand format. Single key direct access to measurements and display scrolling is supported. An EZ Setup feature rapidly guides the user through the basic setup.


The SUPERtrrol-I LE can be programmed for rate/total indication or batching. The various pulse inputs and outputs can be "soft" assigned to meet a variety of common application needs. The user "soft selects" the usage of each feature while configuring the instrument. A 0-20mA or 4-20mA analog output is standard. The user can assign the standard RS-232 Serial Port for data logging, transaction printing, or for connection to a modem for remote meter reading.


An optional RS-485 serial port using Modbus RTU protocol is available. The system setup can also be printed.

WEBSITE www.kep.com/flow

DATASHEET www.kep.com/st1le

BAT R/T-M Flow Rate Totalizer for Pulse Producing Flow Meters		
	<ul style="list-style-type: none"> ▶ CSA Explosion Proof Listed ▶ UL/C-UL Intrinsically Safe Listed ▶ Accepts Inputs From: Magnetic Pickups, Contact Closures, DC Pulses (Optically Isolated) from Pulse Producing Flowmeters ▶ Displays Rate & Total Simultaneously ▶ 5 Digit Rate Display, 8 Digit Totalizer Display ▶ 4-20mA Analog Output Option (8 updates/sec) ▶ Powered From Internal Battery, External DC Supply or 4-20 mA Output Loop ▶ 20 Point Linearization (optional); ▶ 10 Point Linearization with Data Logger option ▶ Isolated Scaled Pulse Output ▶ RS485 Modbus RTU Communication Option 	<p>DESCRIPTION</p> <p>Featuring 5 digits of rate and 8 digits of total, the BAT R/T Millennium edition (BATRT-M) is a battery or loop powered indicator capable of accepting magnetic pickup, DC pulse and switch closure inputs from pulse producing flowmeters. The unit can be ordered with an optional 4-20mA output. The BATRT-M uses the 4-20mA loop to provide power when this output is used. A RS485 Modbus RTU communication option is available.</p>
<p>WEBSITE www.kep.com/flow</p>		<p>DATASHEET www.kep.com/batrt</p>

SQUIRT Loop Powered Flow Rate Totalizer for Analog Flow Meters		
	<ul style="list-style-type: none"> ▶ Linear or Square Root Extraction of Input ▶ 3 ^{1/2} or 4 ^{1/2} Digit Rate Display (Selectable) ▶ 8 Digit Totalizer Display ▶ Calibration, High and Low Values Fully Programmable Through Keypad ▶ No Dipswitches or Pots to Adjust ▶ 16 Bit A/D Resolution ▶ Isolated Scaled Pulse Output ▶ Password Protection of Menu and Totalizer ▶ Battery-backed Storage of Calibration, Setup & Totalizer 	<p>DESCRIPTION</p> <p>Featuring up to 4^{1/2} digits of rate and 8 digits of total, the Squirt is a loop powered indicator capable of accepting either linear or square root 4-20 mA inputs. An isolated scaled pulse output is available for hook up to a remote totalizer. Numeric password protection prevents unauthorized access to menu. The easy-to-read menu prompts make the Squirt so easy to program that you will feel comfortable programming it without the use of a manual.</p>
<p>WEBSITE www.kep.com/flow</p>		<p>DATASHEET www.kep.com/squirt</p>

AMP-2 Dual Preamp & Signal Conditioner for Magnetic Pickups		
	<ul style="list-style-type: none"> ▶ Ultra Low Speed to 4 kHz Operation. ▶ 10 mV Sensitivity. ▶ High Level DC Voltage Pulse Output. ▶ 8.5 to 30 VDC Power Supply Range. ▶ Explosion Proof Housing. ▶ Screw Terminal Hookup. ▶ Explosion Proof, NEMA4 Wall Mount and Circuit Board Mounting Options 	<p>DESCRIPTION</p> <p>The KEP AMP-2 is a two channel amplifier for use with magnetic pickups. It amplifies and squares the low level signals from a magnetic pickup to drive any ratemeter, totalizer or controller. The unit operates from 8.5 to 30 VDC. It has a 10K pullup resistor attached to the open collector output and sinks a minimum of 20 mA to less than 1 V from a maximum of 30 VDC. It is available in OEM (PC board only), NEMA4X enclosure or in a rugged explosion proof housing with screw terminals for easy installation. Operating temperature is -40° to 65°C.</p>
<p>WEBSITE www.kep.com/flow</p>		<p>DATASHEET www.kep.com/amp2</p>

P295 Miniature Slip Printer & P1000 Dot Matrix Roll Printer



P295

- ▶ Worlds Smallest Slip Printer
- ▶ Only 1.6 Kg
- ▶ Epson's ESC/POS Command Set
- ▶ Easy-To-Use Touch Panel
- ▶ Four Print directions
- ▶ Auto eject



P1000

- ▶ Compact Serial Printer for Field Use
- ▶ Uses Standard 2.25" Plain Paper Roll
- ▶ 24 or 40 Column Printing
- ▶ Standard Epson™ Ribbon
- ▶ Internal 2KB Buffer
- ▶ RS232 With Selectable Baud Rate
- ▶ Operates for 2 Hours on Internal Batteries for Hand Held Applications

DATASHEET www.kep.com/p295

DATASHEET www.kep.com/p1000

Gateways Provide Support for Modbus RTU, Modbus TCP and BACnet/IP Protocols



Protocols Include:

BACnet MS/TP • BACnet IP • Modbus RTU • Modbus TCP • Metasys N2 • AB DF1 • AB EtherNet/IP • LonWorks

WEBSITE www.kep.com/gateway

DATASHEET see web site for individual datasheets

Enclosures We offer a wide variety of enclosures to fit your needs



WEBSITE www.kep.com/enclosure

Service & Repair Extend the life of your instrumentation or adapt it to new requirements.



Description:

Upgrading and servicing your equipment improves its longevity and value. KEP offers a variety of replacement parts, including serial communication cards for instrument upgrades, front-end assemblies to replace worn out keypads, spare batteries, fuses, and EPROM program upgrades.

Here are a few cost-effective suggestions:

- ▶ EPROM Upgrades permit the existing instrument to be upgraded with the latest software features functions. Cost begins at under \$30.
- ▶ Serial communication card upgrades can add provisions for printing of transaction documents, and factory floor communication networks for remote reading. Cost begins at under \$150.
- ▶ Replacement front keypad assemblies give instruments a face lift and help maintain the environmental integrity needed for a long service life, often at a cost of about \$60.

CONTACT US BY PHONE FOR DETAILS: 732-935-1320

KAL-D06 Miniature, Low Cost, LCD, Self Powered, Electronic Counter



- ▶ 8 Digits Standard
- ▶ Meets NEMA 4X and IP65 Ratings
- ▶ Long Life (10 Year) Lithium Battery
- ▶ 10 kHz Count Speed
- ▶ Screw Terminal Block
- ▶ Quadrature and High Voltage Input Options
- ▶ UL Recognized Component
- ▶ Wall Mount Enclosure Option

DESCRIPTION

The KAL-D06 counters are small, lithium battery powered, totalizing counters that are panel mounted. The counters are designed as replacements for standard electro-mechanical counters. They use the latest custom CMOS technology and incorporate an 8 digit, 0.354" (9mm) high, LCD display.

WEBSITE www.kep.com/count

DATASHEET www.kep.com/kald06

520k.2 Simple LED Display Counter



- ▶ LED display with very high luminosity
- ▶ 0.315" (8mm) digit height
- ▶ 6 digit display
- ▶ DIN housing, 1.88"x.944" (48x24mm)
- ▶ Easy programming with only 2 buttons
- ▶ Connection with screw terminal
- ▶ IP65 NEMA 4X (front)
- ▶ Input pulse-shape variable RoHS Certified

DESCRIPTION

Simple Display Counter

- Display range 0..999999 with leading zero blanking
- Overflow condition will be indicated by displaying the count value without leading zero blanking
- Count frequency up to 10kHz SET-key resets the counter to zero (can be disabled in setup)
- 1 count input; 1 reset input

WEBSITE www.kep.com/count

DATASHEET www.kep.com/520

MINIcount (MC) High Speed, LED, 1/8th DIN Electronic Totalizer



- ▶ CSA Certified
- ▶ Counts Pulse Inputs Up To 10 kHz
- ▶ NEMA 4X / IP65 Front Panel
- ▶ 1/8 DIN Cutout
- ▶ Add & Subtract Capabilities

DESCRIPTION

The MiniCount (MC) is a dual input, bi-directional totalizer only. This counter does not have presets, outputs or scaling available. Each pulse received on input A (Up) or input B (Down) equals one count.

WEBSITE www.kep.com/count

DATASHEET www.kep.com/mc

MC2 Low Cost, Pulse Input Totalizer with Scaling & Relays



- ▶ Separate Scaling Factors For A & B Inputs
- ▶ Pulse Input - 10 kHz Max.
- ▶ NEMA 4X / IP65 Front Panel
- ▶ Separate Add/Subtract Simultaneous Inputs
- ▶ CSA Listed

DESCRIPTION

The MC2 totalizer provides two level preset control of total. Two pulse input channels enable the unit to handle add/ subtract and standard single channel input. Five digit scale factors allow the unit to display total count in engineering units. Two separate 5 A relay contacts can be used to operate secondary control devices.

WEBSITE www.kep.com/count

DATASHEET www.kep.com/mc2

DRT Two Separate Ratemeters and Totalizers with Combination Function



- ▶ Displays A,B,& C Rate and A,B,& C Total
- ▶ Separate Scaling Factors For A & B Inputs
- ▶ "C" Displays A+B, A-B, A÷B, & A×A+B
- ▶ RS422/RS232 Serial Communication
- ▶ Modbus RTU RS422/RS485/RS232
- ▶ Pulse Input - 10 kHz Max.
- ▶ NEMA 4X / IP65 Front Panel
- ▶ 30mV Magnetic Pickup Inputs

DESCRIPTION

The DRT (Dual Rate Totalizer) is a dual 5 digit Ratemeter 6 digit Totalizer in a 1/8 DIN package. User selects 1 of 6 displays to show A,B or C rate and A,B or C total. Inputs A and B have separate scaling to read in engineering units.

WEBSITE www.kep.com/rt

DATASHEET www.kep.com/drt

KEP-PROC Process Meters with User Selectable 0-10V / 4-20mA / 10-50mA Input



► **Large multi-format display that incorporates:**

- 40 segment bar graph display
- Large 4-digit display
- Separate Starburst display area for annunciators, custom messages and alarm information
- Dynamic backlight color

► **Programmable:**

- Display Range (Both Min & Max Values)
- Custom annunciators
- User-selectable backlight color and intensity
- Two independent alarm set-points
- Two independent outputs
- 4-20mA analogue monitor output

DESCRIPTION

- User-adjustable backlight brightness and color
- Large display
- Wide viewing angle (horizontal and vertical)
- Custom annunciators
- Easy To Use Software:
Just plug into any USB port on your PC, run the freely available APM Configuration software and you're off. No drivers required.

WEBSITE www.kep.com/dpm

DATASHEET www.kep.com/apm

531 Temperature Display for Pt100 and Ni100 RTD's



- Compact and Low-Cost Temperature Display
- Temperature Display in °C or °F
- MIN/MAX Value Retention
- EEPROM Data Backup on Power Failure
- Galvanic Isolation with Reverse Polarity Protection
- Screw Terminal Connectors: pitch 5 mm
- Display Hold Input
- Easy Programming and Operation
- Takes 5 Measurements/second

DESCRIPTION

The 531 Series temperature display accepts inputs from Pt100 and Ni100 RTD sensors in 2, 3 or 4 wire configurations. This compact and low cost temperature monitor is ideal for all applications using Pt100 or Ni100 RTDs.

WEBSITE www.kep.com/dpm

DATASHEET www.kep.com/531

532 Temperature Display for J, K & N Thermocouple Sensors



- Compact and Low-Cost Temperature Display
- Temperature Display in °C or °F
- MIN/MAX Value Retention
- EEPROM Data Backup on Power Failure
- Galvanic Isolation with Reverse Polarity Protection
- Screw Terminal Connectors: pitch 5 mm
- Display Hold Input
- 5 Measurements/second

DESCRIPTION

The 532 Series temperature display accepts inputs from J, K, N Thermocouples with external or internal cold junction compensation. This compact and low cost temperature monitor is ideal for all applications using J, K or N thermocouple sensors.

WEBSITE www.kep.com/dpm

DATASHEET www.kep.com/532

Industrial Trackballs & Keyboards

Industrial Trackballs & Keyboards Many Styles Available



WEBSITE www.kep.com/trackball

DATASHEET see web site for individual datasheets

Contract Manufacturing

KEP-CM Contract Manufacturing



INTRODUCTION

KEP-CM is the contract manufacturing division of Kessler-Ellis Products. We provide quality, competitively priced, electronic sub-assembly services. Our services range from wire stripping and kitted jobs to complete turnkey projects. Our experience in electronic and mechanical assemblies includes wire cutting and termination, cable assemblies, complete chassis assemblies, and PCB population including through-hole device (THD) and surface-mount technology (SMT). We also provide quick turnaround prototypes. We are an ISO9001 registered company.

Capabilities



Our capabilities include the delivery of highly complex prototypes and production boards. Our experienced manufacturing professionals work with your staff to provide constant feedback to improve the product and the process.

Materials:

- ▶ Volume purchasing and kitting
- ▶ Inventory and materials management
- ▶ Large inventory and common components
- ▶ Separate area for customer consigned kits

Assembly:

- ▶ Fully Automated surface mount and mixed technology board assembly
- ▶ Prototype and pre-production quantities to prove manufacturability
- ▶ Low through high volume production quantities

Testing and Inspection:

- ▶ Automatic optical inspection (AOI)
- ▶ Functional Testing

Assembly



Our other production equipment include:

- ▶ Automated stencil printing
- ▶ Pick and Place machines
- ▶ Reflow oven
- ▶ Aqueous washer
- ▶ Automated optical inspection equipment.

AFFORDABLE ASSEMBLIES WITH EXCEPTIONAL QUALITY

KEP-CM assembles printed circuit boards with through-hole or surface mount components or a combination of both. With our surface mount placement equipment, we can handle all your assembly needs including fine pitch IC 's and BGA's.

We closely monitor the manufacturing process from start to finish. We are committed to continuous process improvement and maintaining a tight process control to the requirements of ISO9001:2008.


Through hole production and prototype runs are hand populated. KEP-CM runs both a traditional Leaded wave solder machine and a ROHS compliant wave solder machine.


Customer Satisfaction





Total customer satisfaction is what KEP-CM strives for. From prototyping to volume production, we are committed to quality as demonstrated by our ISO 9001:2008 registration earned. We constantly develop and improve processes to ensure that all products meet or exceeds expectations.


WEBSITE www.kep.com/kepcm

MT8050iE Human Machine Interfaces with 4.3" TFT Display		
	<ul style="list-style-type: none"> ▶ 4.3" 480x272 TFT LCD (MT8050iE) ▶ NEMA4/IP65 compliant front panel ▶ LED Back Light ▶ Serial, USB & Ethernet Ports ▶ Com1 RS485 supports MPI 187.5K ▶ PCB coating process provides corrosion resistance in harsh environment 	<p>DESCRIPTION</p> <p>The MT8050iE Series from KEP is based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the MT8050iE performs as a Human Machine Interface. It features a plastic housing and brand-new color & design scheme. Available in light gray/beige (standard) or dark gray (optional).</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/8050</p>

MT6070iE HMI Panel with 7" TFT Display		
	<ul style="list-style-type: none"> ▶ 7" 800x480 TFT LCD", LED Backlight ▶ Slim design ▶ Fan-less Cooling System ▶ USB Client Port for downloading projects. ▶ COM1 and COM3 (RS485) 2W support MPI 187.5K ▶ NEMA4/IP65 Compliant Front Panel 	<p>DESCRIPTION</p> <p>The MT6070iE series is part of the the new MT8000iE Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the MT6070iE performs as a Human Machine Interface. It features a plastic housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/6070</p>

MT8070iE UL Class 1 Division 2, HMI Panel with 7" TFT Display and Ethernet		
	<ul style="list-style-type: none"> ▶ UL Class 1 Division 2 ▶ 7" 800x480 TFT LCD ▶ NEMA4/IP65 compliant front panel ▶ LED Back Light ▶ Serial, USB & Ethernet Ports ▶ RS485 supports MPI 187.5K ▶ PCB coating process provides corrosion resistance in harsh environment 	<p>DESCRIPTION</p> <p>The MT8070iE series is part of the the new MT8000iE Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the MT8070iE is UL Class 1 Div 2 and performs as a Human Machine Interface. It features a plastic housing and brand-new color & design. Available in light gray/beige (standard) or dark gray (optional).</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/8070</p>

MT8073iE HMI with 7" TFT Display, 2 Ethernet Ports & Easy Access 2.0 Included		
	<ul style="list-style-type: none"> ▶ 7" 800 x 480 TFT LCD, LED Backlight ▶ Fan-less Cooling System ▶ Two Gigabit Ethernet Ports ▶ COM2 and COM3 RS-485 support MPI 187.5K ▶ PCB coating process ensures high reliability to resist from corrosion in harsh environment ▶ Built-in Power Isolation ▶ NEMA4 / IP65 Compliant Front Panel ▶ Built-in EasyAccess 2.0 License 	<p>DESCRIPTION</p> <p>The MT8073iE series is part of the the MT8000iE Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the MT8073iE performs as a Human Machine Interface. It offers 2 Ethernet ports and features a plastic housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/8073</p>

MT8100iE Human Machine Interface with 10" TFT Display		
	<ul style="list-style-type: none"> ▶ 10" 800x480 TFT LCD ▶ NEMA4/IP65 compliant front panel ▶ LED Back Light ▶ Serial, USB & Ethernet Ports ▶ RS485 supports MPI 187.5K ▶ PCB coating process provides corrosion resistance in harsh environment 	<p>DESCRIPTION</p> <p>The MT8100iE series is part of the the new MT8000iE Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the MT8100iE performs as a Human Machine Interface. It features a plastic housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/8100</p>

MT8090XE HMI with 9.7" TFT LED Color Display



- ▶ 9.7" TFT LCD/LED 1024x768 resolution
- ▶ Up to 2000 Screens Push Buttons, Numeric Displays, Alarms, Trend, etc.
- ▶ Recipe Manager Scheduled Events Manager
- ▶ User-defined Macro Execution Email Notification
- ▶ Multi-Language Support
- ▶ 250+ Communication Drivers
- ▶ Advanced 128 User Account Management
- ▶ Online and Offline Simulation tools facilitate fast application debugging
- ▶ 1 x USB Host 2.0 Port
- ▶ Ethernet Port
- ▶ Serial COM Ports
- ▶ IP65 Front Panel
- ▶ 24 Volt DC Input

DESCRIPTION

The MT8090XE touchscreen o/i panels offer crisp graphics from a powerful Cortex A8 1GHz RISC CPU. Supporting a network of up to 64 devices by COM, USB, Ethernet, Internet, They are manufactured by Weintek. Weintek units can exchange & save data and operate each other over the Internet. With over a 150 communication drivers including Allen Bradley, Mitsubishi, Siemens MPI/PPI, Modbus, CANopen the unit can interface to most popular PLCs.

MT8091XE HMI with 9.7" Display and CAN BUS Connectivity

MT8092XE HMI with 9.7" Display, CAN BUS, 2 Ethernet Ports & Easy Access 2.0 Included

WEBSITE www.kep.com/oi

DATASHEET see web site for individual datasheets

MT8121XE Low Cost HMI Panels with Large 12" Display



- ▶ 12.1" 1024x768 TFT LCD, LED Backlight
- ▶ Slim design
- ▶ Fan-less Cooling System
- ▶ Built-in 256MB Flash Memory
- ▶ SD Card Slot for Extension of Storage
- ▶ One USB Host Port and one USB Client Port
- ▶ COM1 and COM3 RS485 Built-in Isolation
- ▶ COM1 and COM3 RS485-2W support MPI 187.5K,
- ▶ Built-in Power Isolator
- ▶ NEMA4/IP65 Compliant Front Panel

DESCRIPTION

The MT8000XE Series HMIs are equipped with a high speed A8 CPU. The higher speed of communication improves the efficiency of database operations. It also allows quick screen refreshes of windows that contain many complex objects. With 16.2M colors display, the HMIs show realistic graphics and information that enables plant personnel to quickly assess and control on-site status.

WEBSITE www.kep.com/oi

DATASHEET www.kep.com/8121xe

MT8150XE Low Cost HMI Panels with Large 15" Display




- ▶ 15" 1024x768 TFT LCD, LED Backlight
- ▶ Slim design
- ▶ Fan-less Cooling System
- ▶ Built-in 256MB Flash Memory
- ▶ SD Card Slot for Extension of Storage
- ▶ One USB Host Port and one USB Client Port
- ▶ COM1 and COM3 RS485 Built-in Isolation
- ▶ COM1 and COM3 RS485-2W support MPI 187.5K,
- ▶ Built-in Power Isolator
- ▶ NEMA4/IP65 Compliant Front Panel


DESCRIPTION


The MT8000XE Series HMIs are equipped with a high speed A8 CPU. The higher speed of communication improves the efficiency of database operations. It also allows quick screen refreshes of windows that contain many complex objects. With 16.2M colors display, the HMIs show realistic graphics and information that enables plant personnel to quickly assess and control on-site status.


WEBSITE www.kep.com/oi


DATASHEET www.kep.com/8150xe


eMT3070B High Temperature HMI with 7" TFT Display & Aluminum Housing		
	<ul style="list-style-type: none"> ▶ Aluminum Housing and Brand-new Color & Design ▶ 7" 800x480 TFT LCD ▶ Built- in 256MB Flash Memory and RTC ▶ NEMA4X/IP66 Compliant Front Panel ▶ One USB Host and One USB Client Port ▶ SD Card Slot supports SD and SDHC cards ▶ Power Isolator Inside ▶ Com1 or Com3 RS485 2W Supports MPI 187.5K ▶ CAN Bus Device Supports CANopen Protocol ▶ Com1 / Com3 RS485 & CAN Bus Built-in Isolation ▶ Supports Ethernet communications 10/100 Base-T 	<p>DESCRIPTION</p> <p>The eMT3070B series is part of the the new eMT Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the eMT3070B performs as a Human Machine Interface. The eMT3070B features an aluminum housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/3070</p>


eMT3105P Human Machine Interface with 10.4" TFT Display & Plastic Housing		
	<ul style="list-style-type: none"> ▶ 10.4" 800x600 TFT LCD ▶ Built- in 256MB Flash Memory and RTC ▶ NEMA4X/IP66 Compliant Front Panel ▶ Supports SD/SDHC Cards ▶ Power Isolator Inside ▶ Com1 or Com3 RS485 2W Supports MPI 187.5K ▶ CAN bus Device Supports CANopen Protocol ▶ Com1 / Com3 RS485 & CAN bus Built-in Isolation ▶ Supports Ethernet communications 10/100 Base-T 	<p>DESCRIPTION</p> <p>The eMT3105P series is part of the the new eMT Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the eMT3105P performs as a Human Machine Interface. The eMT3105P features a plastic housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/3105</p>


eMT3120A Human Machine Interface with 12.1" TFT Display & Aluminum Housing		
	<ul style="list-style-type: none"> ▶ Aluminum Housing and Brand-new Color & Design ▶ Video Input Ports Support NTSC and PAL ▶ 12.1" 1024x768 TFT Industrial Grade LCD ▶ Built- in 256MB Flash Memory and RTC ▶ NEMA4/IP66 Compliant Front Panel ▶ SD Card Slot Supports SD/SDHC Cards ▶ Power Isolator Inside ▶ Com1 or Com3 RS485 2W Supports MPI 187.5K ▶ CAN bus Device Supports CANopen Protocol ▶ Com1 / Com3 RS485 & CAN bus Built-in Isolation ▶ Supports Ethernet communications 10/100 Base-T 	<p>DESCRIPTION</p> <p>The eMT3120A series is part of the the new eMT Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the eMT3120A performs as a Human Machine Interface. The eMT3120A features an aluminum housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/3120</p>

eMT3150A Human Machine Interface with 15" TFT Display & Aluminum Housing		
	<ul style="list-style-type: none"> ▶ Aluminum Housing and Brand-new Color & Design ▶ Video Input Ports Support NTSC and PAL ▶ 15" 1024x768 TFT Industrial Grade LCD ▶ Built- in 256MB Flash Memory and RTC ▶ NEMA4/IP65 Compliant Front Panel ▶ SD Card Slot Supports SD/SDHC Cards ▶ Power Isolator Inside ▶ Com1 or Com3 RS485 2W Supports MPI 187.5K ▶ CAN Bus Device Supports CANopen Protocol ▶ Com1 / Com3 RS485 & CAN Bus Built-in Isolation ▶ Supports Ethernet communications 10/100 Base-T 	<p>DESCRIPTION</p> <p>The eMT3150A series is part of the the new eMT Series from KEP. Based on the design concept of meeting customers' satisfaction with easy-to-use attributes, the eMT3150A performs as a Human Machine Interface. The eMT3150A features an aluminum housing and brand-new color & design.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/3150</p>

cMT3151 HMI with 15" XGA TFT Display		
	<ul style="list-style-type: none"> ▶ Aluminum Housing ▶ Video Input Ports Support NTSC and PAL ▶ 15" 1024 x 768 TFT LCD ▶ Fan-less Cooling System ▶ Built-in 4GB Flash Memory and RTC ▶ SD Card Slot Supports SD/SDHC Cards ▶ COM1 / COM3 RS-485 2W Supports MPI 187.5K ▶ CAN Bus Supports CANopen Protocol ▶ COM1 / COM3 RS-485 & CAN Bus Built-in Isolation ▶ Built-in Power Isolator ▶ NEMA4/IP65 Compliant Front Panel ▶ Built-in EasyAccess 2.0 License 	<p>DESCRIPTION</p> <p>The cMT3151 HMI panel is also a HMI server! The cMT3151 adopts dual-core CPU which greatly increases its performance of data/graphic processing. The cMT3151 is not only operating like a conventional HMI, but also working as a server. You can use cMT Viewer, which is running on cMT-iPC15 or cMT-iV5, to connect to cMT3151 for remote monitoring and controlling.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/3151</p>

cMT-iPC15 Panel PC with 15" XGA TFT Display		
	<ul style="list-style-type: none"> ▶ Aluminum Housing ▶ 15" 1024x768 TFT LCD ▶ Fan-less Cooling System ▶ Built-in 32GB SSD and RTC ▶ SD Card Slot Supports SD/SDHC Cards ▶ Power Isolator Inside ▶ NEMA4/IP65 Compliant Front Panel 	<p>DESCRIPTION</p> <p>The cMT-iPC15 industrial panel PC lets you control HMI and execute third party APPs at the same time! The cMT-iPC15 is based on x86-based architecture and running on WINDOWS operating system. With EasyLauncher software, you can easily access third party APPs, such as: MS Office, PDF Reader, Media player, and many more; together with cMT Viewer, you can monitor and control the HMI at the same time.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/ipc15</p>

cMT-SVR Machine to iPad/Andriod Tablet Interface		
	<ul style="list-style-type: none"> ▶ Two Gigabit Ethernet Ports ▶ Supports E-mail ▶ Compact Design and DIN-rail Mountable ▶ Built-in 256MB Flash Memory ▶ SD Card Slot for Extension of Storage ▶ One USB Host Port ▶ Fan-less Cooling System ▶ Supports MPI 187.5K ▶ Power Isolator Inside 	<p>DESCRIPTION</p> <p>The cMT-SVR server device performs the same task as conventional HMI does. It connects with the PLC, Inverter, Motion controller, and many more controllers to perform protocol conversion, event logging, recipe database maintenance, macro commands execution, and many more.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/svr</p>

cMT-iV5 Industrial HMI Tablet		
	<ul style="list-style-type: none"> ▶ 9.7" 1024 x 768 TFT LCD, LED Backlight ▶ Fan-less Cooling System ▶ Built-in 512 MB Flash Memory ▶ One Gigabit Ethernet Port ▶ Built-in mono speaker ▶ Built-in Power Isolator 	<p>DESCRIPTION</p> <p>The cMT-iV5 industrial HMI tablet offers an easy and smooth user experience, The display is oil-proof, water-proof, and dust-proof and ideal for use in any harsh environments.</p>
<p>WEBSITE www.kep.com/oi</p>		<p>DATASHEET www.kep.com/iv5</p>

cMT Viewer App Available for Windows, cMT-iV5, iPad and Android Devices



DESCRIPTION

cMT Viewer APP provides the most user-friendly interface. You can quickly change the controlling window then monitor the operational status of different machines. Furthermore, cMT Viewer APP is highly integrated into cMT-iV5 touch panel and Tablet PC, so it is extremely easy to use just like using your smart phone.

WEBSITE www.kep.com/oi

DATASHEET n/a

EasyAccess2.0 Access & Manage Your Remote HMI or PLC From Anywhere



DESCRIPTION

EasyAccess 2.0 enables you to access remote HMIs from anywhere in the world. EasyAccess 2.0 is easy to use like instant messaging software. You do not need to memorize the HMI's IP address or spend time on setting up the router, configuring the complicated port mapping, and investigating every network layer when abnormal connection appears.

WEBSITE www.kep.com/oi

DATASHEET ea2.0

MTV-100 Machine TV Interface



- ▶ HD 720p High Resolution HDMI Output
- ▶ One Gigabit Ethernet Port
- ▶ Compact Design and DIN-rail Mountable
- ▶ Built-in 256MB Flash Memory
- ▶ SD Card Slot for Extension of Storage
- ▶ One USB Host Port
- ▶ Fan-less Cooling System
- ▶ Supports MPI 187.5K
- ▶ Power Isolator Inside

DESCRIPTION

The mTV-100 Series, creates a new HMI Vision. HMI device SMALLER, display range BIGGER! The HDMI output allows displaying projects on any size of TV monitors using the HDMI interface, which also supports audio. It has PCB Coating, power isolation protection, and can be fitted into any size of control cabinet with the flexibility of being connected to any size HDTV!

WEBSITE www.kep.com/oi

DATASHEET www.kep.com/mtv

Flat Panel Monitors & Panel PC

SLEEK Series 7" - 21.5" Industrial Flat Panel Monitors



- ▶ Many Display Sizes Available: 7", 8", 10.1", 12.1", 15", 17", 18.5", 21.5"
- ▶ LCD Resistive touch window or projected capacitive touch
- ▶ Aluminum die casting enclosure
- ▶ Front bezel NEMA4/IP65 rating
- ▶ Rear side OSD
- ▶ Wide Range Power Input DC 9~36V

DESCRIPTION

KEP's SLEEK line of industrial Flat Panel Monitors (FPMs) are designed with a slim case and packed with features. The industrial-grade TFT LCD display includes a resistive touch screen. The slim design and affordable pricing make the SLEEK series the ideal choice for any industrial monitor application.

WEBSITE www.kep.com/fpm

DATASHEET see web site for individual datasheets

Ultimate HMI Bundle cMT-iPC Panel PC preloaded with Infilink-HMI Software



- ▶ cMT-iPC15 with Windows
- ▶ Unlimited Tag Infilink-HMI Run Mode
- ▶ Design Mode
- ▶ OPC Client Functionality
- ▶ Free PLC Driver Included
- ▶ E-mail and Web Enabled
- ▶ Historical Trending, Alarming, Data Logging
- ▶ NO yearly "maintenance" or "support" fees

DESCRIPTION

Bundle your 15" solid state drive panel PC running Embedded Windows, with our Infilink-HMI Software. Included are the Infilink-HMI software unlimited tag and reporting feature, and any one KEPServerEX PLC driver. These software licenses are not transferable to other hardware.

WEBSITE www.kep.com/oi

DATASHEET n/a

Infilink-HMI Industrial Automation Software



- ▶ Unlimited Tag Infilink-HMI Run Mode is Only \$1995!
- ▶ Free Design Mode
- ▶ OPC Client Functionality
- ▶ Free PLC Driver Included
- ▶ E-mail and Web Enabled
- ▶ Historical Trending, Alarming, Data Logging included in base price!
- ▶ NO yearly "maintenance" or "support" fees

Sample Screen Shot



DESCRIPTION

Infilink HMI is a full featured, Windows based industrial automation software solution, at a price much less than our competitors. Our simple pricing, free technical support, and ease-of-use make this a perfect choice for OEMs, industrial automation system integrators, HVAC integrators, and various other automation environments. Infilink supports Windows 7/8/10.

Sample Screen Shot



Sample Screen Shot



Sample Screen Shot



WEBSITE www.kep.com/hmi

DATASHEET www.kep.com/hmi

KEPServerEX OPC Server



Supported Devices

- ▶ SUPERtrol Series STILE . ST1, ST2
- ▶ LEVELTROL II
- ▶ MS716
- ▶ MS748
- ▶ ES747
- ▶ Nearly all PLCs and industrial protocols are supported

DESCRIPTION

KEPware's KEPServerEX OPC Server connects your PC nearly any industrial automation communication protocol. In addition to common protocols such as Modbus, the built-in KEP communication's protocol for the Supertrol's RS232 port is also supported. KEP bundles one KEPServerEX PLC driver suite with each Infilink-HMI at no additional charge. KEP sells KEPServer for use in systems with KEP software or hardware.

WEBSITE www.kep.com/hmi

DATASHEET www.kep.com/kepserver



About KEP

Kessler-Ellis Products (KEP) designs, manufactures and services Industrial, Process, Automation and Control products. Our products include flow instrumentation, counters/timers/rate meters, PLC operator interfaces, HMI software and a Contract Manufacturing division. Founded in 1961 by Corson Ellis Jr., as a distributor of electromechanical counting devices. The company quickly expanded into a full line manufacturer of electronic counters. KEP is an ISO 9001 registered company designing, manufacturing and servicing reliable, quality products suitable for all industries. We are proud of our company and the people who work for us. KEP is deeply committed to satisfying our customers.



Kessler-Ellis Products, Co.
10 Industrial Way East
Eatontown, NJ 07724

Phone: (732) 935-1320 or (800) 631-2165 • Fax: (732) 935-9344

<http://www.kep.com>